

Center for Policy, Planning and Evaluation
Division of Epidemiology–Disease Surveillance and Investigation

July 24, 2019

Health Notice for District of Columbia Health Care Providers
Updates to Vector-borne Disease Screening and Reporting Guidelines

Summary

As DC enters the summer months, we approach the height of mosquito and tick seasons, and our time of greatest risk for acquiring vector-borne diseases. With warmer weather and changing humidity levels, mosquitoes and ticks will become more active in their search for blood meals. Currently, the best way to prevent vector-borne diseases is through the use of personal protection measures such as wearing protective clothing, using appropriate repellents, and avoiding at-risk areas.

This health notice serves as a reminder for healthcare providers to be vigilant for vector-borne diseases, and provides information on resources and reporting guidelines for suspected and confirmed cases of vector-borne diseases that occur in DC. Please share this notice with all appropriate staff at your facility.

Background

In May 2018, the Centers for Disease Control and Prevention (CDC) released a Vital Signs report (<https://www.cdc.gov/mmwr/volumes/67/wr/mm6717e1.htm>) summarizing the vulnerability of the U.S. to vector-borne diseases. The report noted a threefold increase in the number of vector-borne diseases reported in the U.S. from 2004 through 2016, along with nine new pathogens spread by mosquitos and ticks that were either discovered or introduced since 2004.

During this period, tick-borne diseases accounted for 77% of all vector-borne disease reported to the CDC, with Lyme disease (LD) accounting for 82% of all tick-borne cases. LD is transmitted to humans through the bite of an infected black-legged tick (*Ixodes scapularis*), which is commonly found in DC and the surrounding areas. Lyme disease is the most commonly reported tick-borne illness in DC residents. Early symptoms of LD include erythema migrans rash (“bull’s-eye” rash with central clearing starting at the site of the tick bite, fever, chills, headache, fatigue, muscle and joint aches, and swollen lymph nodes. More information can be found on our tick-borne diseases (<https://dchealth.dc.gov/page/tickborne-diseases>) and LD (<https://dchealth.dc.gov/page/lyme-disease>) websites.

West Nile Virus (WNV) was first identified in DC in 2002, and is the only one that is endemic and is known to be spread by local mosquitoes. Most people who are infected with WNV have no symptoms. However, 1 in 5 develop a febrile illness, and 1 in 150 can develop severe illnesses such as encephalitis and meningitis. More information on WNV can be found on our website (<https://dchealth.dc.gov/node/115182>).

Seasonal mosquito surveillance in DC has shown mosquito vectors, *Culex* species, testing positive for West Nile virus every year. Last year, mosquitoes of the genus *Psorophora* were identified in DC for the

first time, and several were positive carriers for WNV. This species is a known carrier of other encephalitic viruses as well. As a result, this may become a new concern for the District not previously recorded in surveillance records. Additionally, the presence of *Aedes* species, known carriers of Chikungunya, Dengue, Yellow Fever, and Zika, creates a low but non-zero risk of an isolated introduction of a non-endemic disease. Fortunately, to-date in DC there have been no reported imported arboviral diseases, such as Zika virus, spread by local mosquitoes. More information can be found on our mosquito-borne diseases website (<https://dchealth.dc.gov/page/mosquito-borne-diseases>).

Guidelines for Vector-borne disease reporting for Healthcare Providers

Cases of vector-borne diseases should be reported by the timeframe indicated in our Notifiable Disease reporting guidelines online by submitting a Notifiable Disease and Condition Case Report Form via the DC Reporting and Surveillance Center (DCRC). Online case reporting and additional guidance and resources can be found on our Infectious Disease webpage (<https://dchealth.dc.gov/service/infectious-diseases>). Testing through DC Public Health Laboratory (DC PHL) can also be requested through this form.

<u>Tick-borne diseases</u>	<u>Reporting Timeframe</u>
Babesiosis	48 hours
Ehrlichiosis	48 hours
Lyme disease (<i>Borrelia burgdorferi</i>)	48 hours
Powassan virus	48 hours
Spotted Fever Rickettsioses (including Rocky Mountain Spotted Fever)	48 hours
Tularemia	Immediately by phone; case report within 24 hours

<u>Mosquito-borne diseases</u>	<u>Reporting Timeframe</u>
Acute arboviral encephalitis (eg. Eastern Equine, St. Louis, Western Equine etc)	Immediately by phone; case report within 24 hours
Chikungunya virus	24 hours
Dengue virus	24 hours
West Nile virus	48 hours
Yellow fever	Immediately by phone; case report within 24 hours
Zika virus	24 hours

Guidance on Testing

First line testing for vector-borne diseases should typically be performed at your facility or a commercial laboratory. **Only confirmatory testing is available through the DC PHL.**

- Confirmatory testing can be performed by either the DC PHL or the CDC.
 - A list of tests available through the CDC can be found on their website (<https://www.cdc.gov/laboratory/specimen-submission/list.html>).
 - If going to CDC please be sure to complete the CDC 50.34 form (<https://dfs.dc.gov/publication/phl-forms-and-documents>) and include the completed form with the specimens.
 - **In most cases, testing must be approved by DC Health.**
- If testing is approved, facilities are required to complete both a PHL Test Requisition Form and PHL Chain of Custody Form (<https://dfs.dc.gov/publication/phl-forms-and-documents>). **Samples without these two forms will NOT be accepted.**
- Final laboratory test results will be sent to your facility by secure fax ONLY. Please ensure your secure fax number is always included on paperwork submitted to DC PHL. Please allow two - four weeks for final results. If the sample needs additional testing at CDC, additional time will be required, however the DC PHL results will be reported to the provider.

Cases of Public Health Concern

In cases of public health concern (i.e. local transmission of a non-endemic vector-borne disease, Zika virus testing in an infant, etc), DC Health should be contacted for further guidance, and testing may be available through the DC PHL.

**Please contact the DC Health Division of Epidemiology–Disease Surveillance and Investigation at:
Phone: 202-442-9143 (8:15am-4:45pm) | 844-493-2652 (after-hours calls)
Fax: 202-442-8060 | Email: mosquito.info@dc.gov or ticks.info@dc.gov**